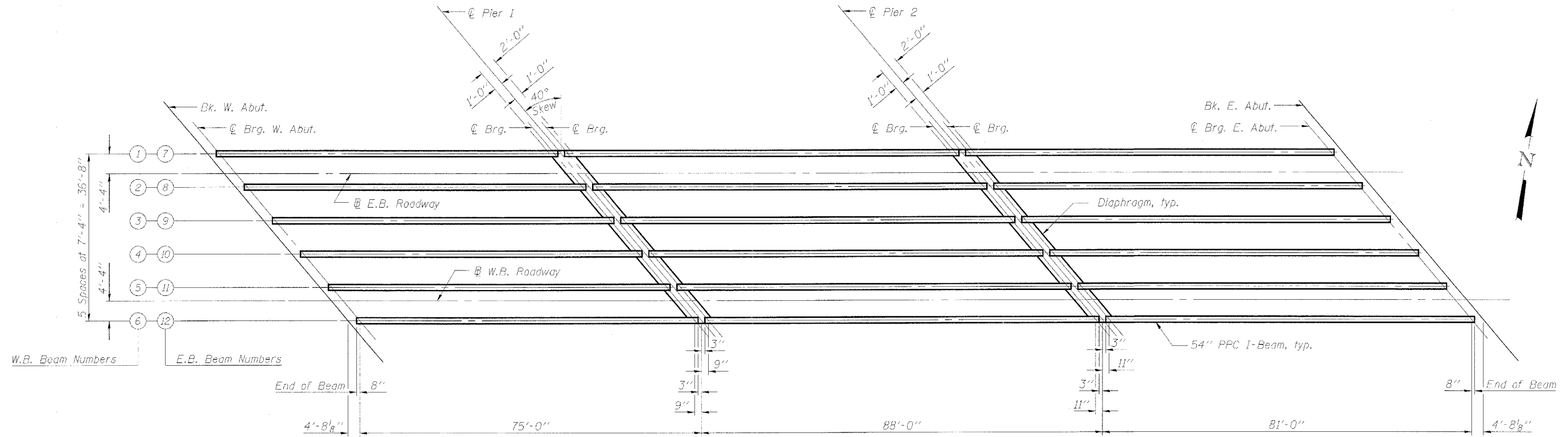


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 13 36 SHEETS
F.A.P. 315	34-6, 55-1	HANCOCK	433	211	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #68206



PLAN

(E.B. Structure and W.B. Structure)

	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.6 Span 3	
I	(in ⁴) 213715		213715		213715	
I'	(in ⁴) 495935		495935		495935	
S_b	(in ³) 8559		8559		8559	
S_b'	(in ³) 12642		12642		12642	
S_t	(in ³) 7362		7362		7362	
S_t'	(in ³) 22269		22269		22269	
DC1	(k/')	1.332		1.332		1.332
M DC1	(k)	881.0		1241.0		1025.0
DC2	(k/')	0.150	0.150	0.150	0.150	0.150
M DC2	(k)	62.3	97.4	41.9	109.2	74.4
DW	(k/')	0.333	0.333	0.333	0.333	0.333
M DW	(k)	138.4	216.5	93.1	242.6	165.3
M ₄ + Imp	(k)	1018.7	1056.6	955.2	1113.3	1105.37

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_{Imp} is the moment due to live load impact on the composite section.
DC1 is the dead load acting on the non-composite section.
DC2 is the dead load acting on the long-term composite section.
DW is the dead load acting on the long-term composite section due to wearing surface.

	W. Abut.	Pier 1	Span 1	Pier 1	Span 2	Pier 2	Span 2	Pier 2	Span 3	E. Abut.
R DC1 (k)	54.7		49.5		57.5		63.3		59.1	58.5
R DC2+DW (k)	13.9		21.6		21.6		22.8		22.8	15.2
R ₄ (k)	76.4		54.3		54.3		56.1		56.1	78.8
R Imp (k)	19.3		10.9		10.9		11.2		11.2	19.8
R Total (k)	164.3		136.2		144.3		153.4		149.2	172.3

DESIGNED	KLH
CHECKED	EML
DRAWN	EML
CHECKED	KLH

HORNER & SHIFRIN, INC.
ENGINEERS ■ ARCHITECTS ■ PLANNERS

FRAMING PLAN
ILLINOIS ROUTE 336 OVER
EAST FORK OF THE LAMOINE RIVER
F.A.P. ROUTE 315 - SECTION 34-6, 55-1
HANCOCK COUNTY; STA. 1432+02.61
STRUCTURE NO. 034-0511 (E.B.)
STRUCTURE NO. 034-0512 (W.B.)