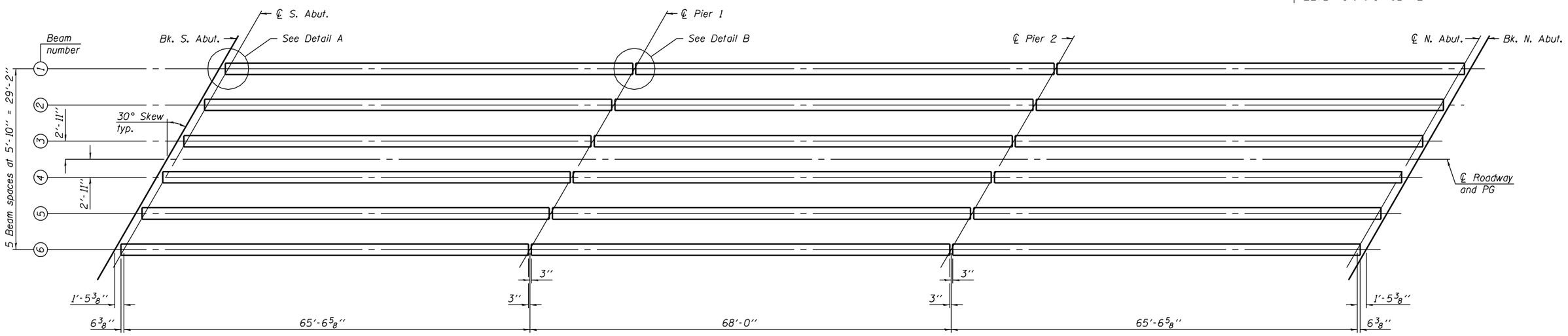
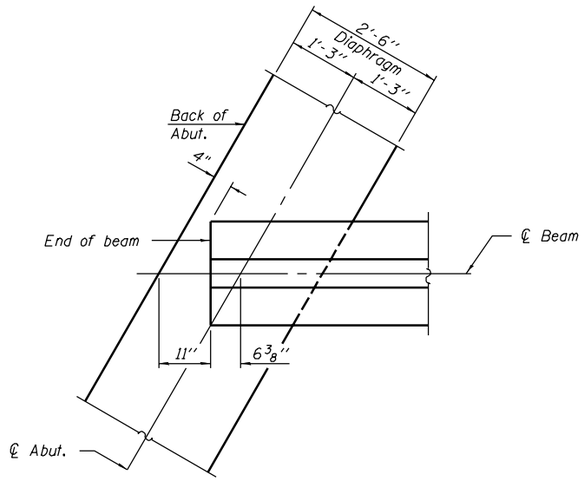
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 1671	‡	DOUGLAS	181	98
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

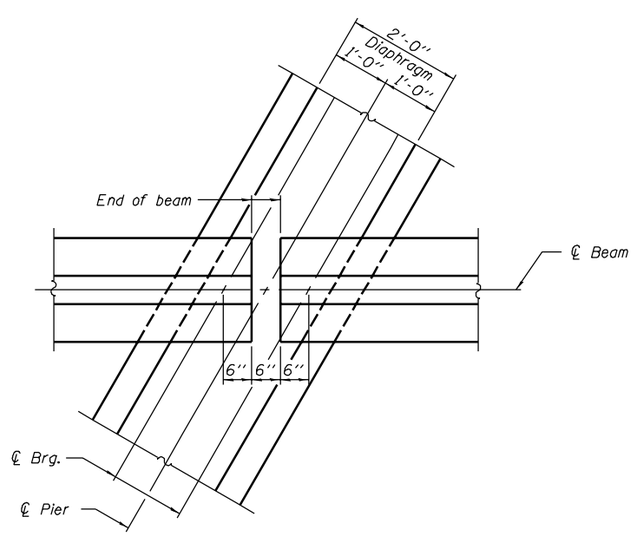
SHEET NO. 14
46 SHEETS

Contract #70258
‡ 22VBR-1 and 144SBR-2





DETAIL A



DETAIL B

INTERIOR BEAM MOMENT TABLE				
		0.4 Span 1 0.6 Span 3	Pier 1 or 2	0.5 Sp. 2
I	(in^4)	90955.6		90955.6
I'	(in^4)	262303		262303
S_b	(in^3)	5152.7		5152.7
S_b'	(in^3)	8557		8557
S_t	(in^3)	3735.6		3735.6
S_t'	(in^3)	23079		23079
D_ℓ	(k/')	1.062		1.062
M_ℓ	('k)	557		587
s_ℓ	(k/')	0.442	0.442	0.442
Ms_ℓ	('k)	149	197	59
M_L	('k)	382	291	321
M (Imp)	('k)	99	76	84

INTERIOR BEAM REACTION TABLE				
		Abut.	Pier 1 Span 1 Pier 2 Span 3	Pier 1 Span 2 Pier 2 Span 2
R_ℓ	(k)	34.8	34.8	36.1
Rs_ℓ	(k)	11.5	16.3	16.3
R_L	(k)	31.4	20.5	20.4
Imp.	(k)	8.2	5.3	5.3
R (Total)	(k)	85.9	76.9	78.1

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_ℓ is the moment due to dead loads on the non-composite prestressed beam. It is conservatively calculated at 0.5 of the span.
Ms_ℓ 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.

DESIGNED	Curt M. Evoy
CHECKED	Rebecca L. Tharp
DRAWN	Michael B. Mossman
CHECKED	C.M.E. / R.L.T.

August 4, 2006
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

FRAMING PLAN
F.A.S. RT. 1671 - SEC. 22VBR-1
DOUGLAS COUNTY
STATION 1151+65.86
STRUCTURE NO. 021-0061